ABSTRACT OF THE DISCLOSURE

A data communication network for DiffServ communications includes a customized Java socket factory added to clients connected to a data communication network having a DiffServ-enabled edge router. When an application running on a client system wishes

5   to make a remote procedure call to a remote server system on another network, it makes a call to an RMI stub which invokes an RMI transport layer having the custom socket factory to generate a socket used in the RMI call. The custom socket factory detects when a high priority RMI call is being made and can determine the identity of the calling procedure as well. The socket factory makes a side channel communication to the edge router to provide this information to the edge

10   router, which then makes use of this data when performing DiffServ classification for packets transmitted during the course of the call.